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ABSTRACT

The study explored the effects of student selection versus teacher selection of instructional activities on the activities selected and reasons given by teachers and 42 elementary resource room students for selecting particular activities. Ss' progress was monitored by a curriculum-based repeated measurement data collection and evaluation system in which teachers were notified when a change in instruction was needed for each student. One-third, of the Ss selected their own instructional changes from an experimenter-generated set of activities, while the remaining Ss performed activities selected by teachers from the same set. Teachers selected significantly more high structured activities than students and cited more skill related reasons for their selection. It was suggested that when students are given options, the options should include only structured activities. (Author/CL)

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TEACHER/VS STUDENT SELECTION OF INSTRUCTIONAL ACTIVITIES

Research Report No. 117

Caren Wesson,

Institute for Research on Learning Disabilities



Director: James E. Ysseldyke

The Institute for Research on Learning Disabilities is supported by a contract (300-80-0622) with the Office of Special Education, Department of Education, through Title VI-G of Public Law 91-230. Institute investigators are conducting research on the assessment/decision-making/intervention process as it relates to learning disabled students.

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Research Report No. 117

TEACHER VS STUDENT SELECTION OF INSTRUCTIONAL ACTIVITIES

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Institute for Research on Learning Disabilities

University of Minnesota

May, 1983

Abstract

This study explored the effects of student selection versus teacher, selection of instructional activities on the activities selected and the reasons given by teachers and students for selecting particular, activities. Forty-two resource room students in grades 3-6 served as subjects. The progress of these students was monitored by means of a technically adequate curriculum-based repeated measurement data collection and evaluation system. The system was constructed to, notify the teachers when a change in instruction was needed for each One-third of the students selected their own instructional changes from an experimenter-generated set of activities. For the the other two-thirds, the teachers selected activities from this same set. The dependent data were the number of structured and unstructured activities, selected by teachers and students and the reasons cited for Teachers selected significantly more high selections. structured activities than students and cited more skill-nelated reasons for their selections. The discussion includes implications for practice.

Teacher vs Student Selection of Instructional Activities

. Teaching requires that a multitude of decisions be made daily. Teachers must address such issues as what to teach, how to teach, when to teach what, and who should be taught what skill. In fact. Shavelson and Borko (1979) contend that the basic teaching skill is decision making. Preactive decisions are made in a conscious manner, allowing the teacher to consider various pieces of information. When making preactive decisions, teachers often consider their own informal observation, anecdotal reports, school records, traditional tests scores, and curriculum-based assessment measures. When the decision is made about how to teach, the goal is to find an instructional technique that will improve the student's learning. Unfortunately, little is known about how teachers make this instructional decision, what instructional methods typically are selected, or how teachers' 🗐 decisions differ from student decisions when selecting instructional techniques. The purpose of this study was to examine the effect of student selection of instructional activities versus teacher selection of instructional activities on the activities that are chosen. second purpose was to address informally the question of why teachers. and students select certain instructional activities:

Literature Review

Only a few researchers have directly addressed the nature of the instructional activities selected by teachers. Potter and Mirkin (1982) asked elementary and secondary special education teachers to complete a survey that addressed the question of the instructional techniques used in various academic areas. For reading, over half the

teachers used work on subskills as the primary instructional strategy, followed by practice, games, modality training, and modeling. McNair and Joyce (1979) investigated the planning processes of regular education teachers and reported that most teachers developed their lessons based primarily on curriculum materials. Joyce (1980) added in a later report that the "flow of activities" (p. 16) stems from the selection of instructional materials. Baker, Herman, and Yeh (1981) reported widespread use of games and adjunct devices such as audiovisual materials in 250 schools. These authors also explained that the use of puzzles, games, and audio-visual devices appeared to be negatively related to student achievement. Implications from these findings indicated that teachers need to improve their skills in selecting educational materials and methods. A similar conclusion was reached in a study, involving 105 elementary learning disabled students. Léinhardt, Zigmond, and Cooley (1981) used a causal model approach to explore the relationships among reading behavior, instruction, and reading achievement. These authors stated that "although teachers are skillful in getting students to do what they are assigned, they are less attuned to selecting the best activities for them to engage in." (p. 358)

If it if true that teachers do not consistently make the best decisions about how to instruct, one possible alternative is to allow students to make some of these decisions within a structured format. Student input, into instructional decision making has received increased attention in recent years. Some researchers have focused on student self scheduling of instructional activities (Bushell &

Bushell, 1976; Lovitt, 1973; Wang & Stiles, 1976), while others have concentrated on student selection of reinforcers (Felixbrod & O'Leary, 1974; Glynn, 1970; Glynn, Thomas, & Shee, 1973; Lovitt & Curtiss, 1969; Parks, Fine, & Hopkins, 1976, Wall, 1982; Wall & Bryant, 1979). The vast majority of these studies yielded results indicating that student input has definite advantages. However, relatively few studies have considered student selection of instructional activities; the results of these studies have been mixed.

George and Kindall (1976) reported a study in which each experimental student was allowed to choose how many and which activities they would engage in from various learning packages designed to teach geometry. The teacher made these decisions for the control students. The subjects were high school students, 29 females and 31 males. The dependent data were posttest scopes on the four learning activity packages (LAPs) used throughout the eight-week study, the time required to complete the LAPs, and student attitude toward learning and school. Results indicated no significant differences in the posttest scores of students who selected their own activities and students required to complete all activities in each LAP. The time required to complete each of the four LAPs decreased as the students progressed through the four LAPs, regardless of the treatment condition. The semantic differential technique used to elicit attitudes yielded statistically nonsignificant although the tendency was for students to prefer student choice. Students reported that the system that allowed them to choose activities was moré interesting, more enjoyable, less time consuming,

more conducive to self understanding, permitted better content recall; and made them feel that teachers were more confident in them. The authors concluded that student directed learning was as effective and efficient as teacher directed learning and also a more positive experience for the students.

Taffel (1976) also experimented with student selection of academic activities. In an experiment with three treatment groups, Choice, No Choice, and Control, the number of math problems completed and the time spent working were dependent data. During the last half of a tutoring session, students in the Choice treatment were allowed to select a special arithmetic activity if they completed a specified number of math problems in the first half of the tutoring session. In the No Choice condition, students could also earn the opportunity to dor a special activity, but the experimenter selected the activity for the student. The control students worked on standard math problems for the entire tutoring session regardless of their performance... Results indicated no statistically significant difference between the treatment groups on either dependent variable. However, a significant increase in the number of problems completed by the Choice group during the treatment condition over the pretreatment condition was noted. The set of activities from which the Choice group was allowed to choose was designed to include some attractive and some less attractive options. The interaction of choice and attractiveness could not be adequately assessed. Therefore, a second experiment was conducted in which all activities were designed to be fairly unattractive. The results of the first experiment were not

replicated. The author concluded that in order for selection to produce positive effects, the options must be at least moderately attractive.

Two dimensions of the learning setting, teacher versus student selected tasks and working alone—or—in pairs, were manipulated in a study conducted by Jackson (1978). Four treatment conditions were established: Teacher—assigned Singles; Teacher—assigned Pairs; Student—selected Singles; and Student—selected Pairs. Based on behavior stream specimen records, time on task and quality of time were observed and analyzed. Teacher—assigned versus student—selected tasks was not a significant factor affecting quality of or amount of time on task. All students spent a high percentage of time on task, but children working in pairs had higher quality time and worked more independently than children working alone.

Within an aptitude x treatment interaction framework (Cronbach & Snow, 1977), Greene (1976) tested the assumption that when given an opportunity to structure their own learning, students would make choices that would facilitate the attainment of educational goals. One hundred sixty-five students in nine fourth and fifth grade classrooms participated. Stratifying by sex, all children in each class were randomly assigned to either a Choice or No-choice group. The students in the No-choice group completed one lesson per day, in order, from The Thurstone Letter Series Problems workbook and were evaluated by the experimenter. Students in the Choice group worked in the workbook during free time, completed the lessons in the order of their choice, and corrected and evaluated their own performance.

Pretest scores included two cognitive measures, pretests in the workbook, and Lorge-Thorndike scores, as well as four motivational expectancy of success, importance of success, causal aptitudes: attributions, and evaluative orientation. Posttest information was collected on a letter problems criterion test, causal attributions for performance in the workbook, and interest in learning more about letter series problems. Results supported the predicted positive interrelationships among the aptitudes and the ability to make "wise" decisions for Choice students high in motivation and cognition. The Choice students maintained higher scores on the affective measures. Also of interest were findings that indicated that low ability, high confidence children performed significantly superior to low ability, low confidence students. Most importantly, high ability students made more progress in the Choice treatment and low ability students made most progress in the No-choice condition.

Kosiewicz, Hallahan, and Lloyd (1981) hypothesized that providing the opportunity for a learning disabled student to select an instructional strategy within a structured situation would result in improved performance. They hoped this procedure would help "to combat the apparent passivity of the student with learning problems" (p. 281). They tested this hypothesis using a single subject design (ABCBC) consisting of the following phases: baseline, teacher choice, student choice, teacher choice, and student choice. During the four experimental phases, one of two instructional techniques was applied to improve handwriting. The first was a self-instructional approach in which the subject read a paragraph of rules about handwriting. The

second approach was a self-correction procedure in which the 11-year-old student circled his own correctly printed letters and words. The dependent measure was the percent of possible points on a daily writing assignment earned by correct lettering and spacing. Visual analysis of the graphic display of these dependent data indicated that performance improved when either handwriting procedure was used and that student selection was superior to the teacher selection procedures.

The findings from these five studies focusing on the effects of student selected instructional activities were inconsistent. Kosiewicz et al. (1981) found self selection superior to teacher selection for an LD boy. Yet Jackson (1978) found no effects. George and Kindall (1976) found no difference in performance but modest effects with respect to student satisfaction. Taffel (1976) found that the attractiveness of the task options was important and Greene (1976) demonstrated that the characteristics of the student involved was a necessary consideration. Thus, student selection of instructional activities must be investigated further to determine whether and under what conditions it may be an effective procedure. In addition, none of these studies looked specifically at the differences between studer; and teacher selected techniques. the literature indicates, teachers do not always select optimal instructional approaches for students, is it possible that students will make better choices?

Method

Research Questions

The research questions posed for this investigation were: (a) what is the effect of student selection of instructional activities versus teacher selection of instructional activities on the activities selected, and (b) what are the reasons given by teachers and students for selecting particular instructional activities?

Subjects

Subjects for this study were 42 elementary students from a rural/
special education cooperative school district. Students were selected
from the caseloads of eight resource teachers who had agreed to
participate in the study. To be eligible for participation, students
had to be in grades 3 to 6 and receive at least 30 minutes of reading
instruction daily in the resource room. Students receiving reading
instruction in resource rooms in this special education cooperative
school district are eligible for special services if they read at
least two times fewer words per minute than their regular education
classmates. Potential special education students and a random
selection of students in the same grade and same school read the same
passages from a basal text and the average rate of the regular
education students is compared to each of the targeted students. This
procedure is described in greater detail—elsewhere (Marston, Tindal, &
Deno, 1982; Wesson, Deno, & Mirkin, 1982)

Of the 42 subjects, seven were girls and 35 were boys. The number of subjects per grade was 11, 12, 8, and 11, for grades three, four, five, and six, respectively. The median number of years these

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to reading in the resource room varied from 30 to 90 minutes daily for the 42 students. Specifically, 14 students spent 30 minutes, 8 spent 45 minutes, 2 spent 50 and 55 minutes each, 14 spent 60 minutes, one spent 75 minutes, and one 90 minutes. The majority of the students' school day was spent in regular education classrooms.

Of the eight teachers participating in the study, seven were female and one male. Their prior experience in special education ranged from 0 to 11 years.

Procedures

Training. Teachers were trained individually by the experimenter as to how to work with students in the two treatment conditions. Training was facilitated by a set of instructions. The experimenter met with each teacher in his or her classroom to review the instructions and answer any questions. In addition, teachers were requested to call the experimenter if they had any doubts about what to do. The experimenter initiated weekly contact, either by phone or in person, with each of the teachers throughout the nine week study.

Prior to the beginning of this study, these teachers were trained in the use of measurement procedures during a week-long workshop prior to the preceding school year and during semi-weekly workshops during the year. At the onset of the present study, the teachers had been implementing a monitoring system for one and one-half school years. This system is described below.

Daily measurement consisted of one-minute timed samples of reading from the basal reading texts used in the district. For this



study, 12 students were measured in Ginn 720, 18 in Houghton-Mifflin, and 12 in Scott Foresman. Two methods of measuring and charting were used, mastery and performance measurement. For the students in this study, 35 were monitored with mastery measurement and seven with performance measurement.

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In performance measurement, the measurement task is a random sample of items from a large pool of material, and the goal is to improve the level of performance on that material. Figure 1 illustrates performance measurement. The abscissa (horizontal axis) represents school days and the ordinate (vertical axis) represents the rate of performance on the measurement task; each data point represents the rate of performance on a given day. The line of best fit through the data depicts the student's rate of improvement in performance on the pool of material.

Insert Figure 1 about here

Figure 2 depicts mastery measurement. Here, the abscissa represents school days and the ordinate represents successive segments or objectives of the curriculum mastered; each data point represents the number of curriculum segments mastered on a given day. The line of best fit through the data points depicts the rate of student progress through the curriculum. The goal of repeated mastery assessment is to increase the student's rate of mastery in the curriculum. The teacher measures the student on a random samp/le of material from the current instructional curriculum unit until mastery

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progresses to the next segment in the hierarchy, and the pool of material on which the teacher measures the student also progresses to the next segment in the hierarchy.

Insert Figure 2 about here

Regardless of which measurement system teachers used, the long-range goals were written in the same format. Teachers measured each child's reading performance in successively easier or more difficult material until they identified the long-range goal (LRG) level, the level in which students read at entry level criteria (30-39 words per minute for Grades 3-6). After this level of the curriculum was identified, the teachers wrote the LRG using a prespecified minimal criterion of 70 words per minute for grades 3-6. (See Figure 3.)

Insert Figure 3 about here

Short-term objectives were based on the long-range goals (LRG). In computing the short-term objective (STO) using a performance measurement system, teachers first subtracted the baseline level of performance from the criterion level listed in the LRG. Dividing this difference by the number of weeks necessary until the annual review, they arrived at the number of words per week gain necessary to meet the long-range goal criteria. When writing mastery measurement STOs, teachers measured the students in successively easier levels of

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material until the level in which the student met the LRG criterion (70 wpm) was identified. The teacher then counted units (pages or stories) between this already mastered material and the LRG material. The number of units to be mastered was divided by the number of weeks specified in the LRG and this figure became the STO. The format used for writing performance and mastery measurement short-term objectives is shown in Figure 4.

Insert Figure 4 about here

In addition, the teachers also were trained in the use of the measurement procedures for evaluation of the instructional program. Teachers measured student progress three times each week and plotted the data on a graph. In order to monitor student growth, the baseline reading level and the long-range goal were connected by an aimline that showed the students' desired progress. Every seven data points, the teachers were to monitor student growth by means of the split-middle or quarter-intersect method (White & Haring, 1980). An example is given in Figure 5. If the student was progressing at a rate equivalent to or greater than that indicated by the aimline, the instructional program was continued; if the projected rate of growth was less than that indicated by the aimline, teachers were directed to make a substantial change in the student's program.

Insert Figure 5 about here

For the present study, teachers were trained to modify this system as follows. The changes in the student's reading program were to be chosen from a set of reading activities supplied by the experimenter, and students in one of the treatment conditions chose their own instructional activities. In the other treatment condition, teachers chose from the activities supplied by the experimenter. the beginning of this study, a set of step-by-step directions for 12 reading activities was distributed to each teacher along with directions for each of the three treatment conditions. Each teacher worked with students in both treatment conditions. Two teachers worked with two students in the teacher select treatment condition and one student in the student select treatment condition. Six teachers, worked with four students in the teacher select condition and two students in the student select treatment. These treatment conditions. are described below.

Teacher Selects Activities (TSA). At the onset of the study, teachers reviewed eight of the 12 activities and selected two activities that they judged would be most effective for each student. These two activities were implemented and data taken three times a week. If, according to the data utilization strategy, a change in instruction was needed, the teacher reviewed four more instructional activities and chose one to replace one of the original two activities. The teacher reviewed four activities each time the data indicated a change in instruction was necessary and chose an activity to replace one of the two previously implemented.

Student Selects Activities (SSA). Students in the SSA group selected their own reading activities. At the onset of the study, the

reteachers used experimenter-prepared materials to describe eight of the activities to the students. At this time, the SSA students were directed to select two reading activities that they believed would est help them learn to read better. Then, as the data utilization rules were applied individually to the student's reading data and a change in the instructional plan was warranted, the students selected a new strategy from a set of four that the teacher presented to the student in the same fashion as described above. The new reading activity replaced one of the two previously implemented.

Given the nine week length of the study, the three times per week schedule of student reading measurement, and the data utilization rules, a range of two to six reading activities was used with the students in any of the three treatment conditions. The specific activities were: (1) Newspaper Hunt; (2) Oral Reading and Error Practice; (3) Illustrating a Story; (4) Language Experience; (5) Making Clay Words; (6) Direct Practice with Prompting; (7) Simplifying the Task; (8) Reading and Reacting; (9) Choral Reading; (10) Comprehension Questions; (11) Tape Recorded Stories; and (12) Silent Reading and Retelling the Passage. The order of selection was as follows.

- (1) At the onset of the study

 Selection 1 was selected from activities 1, 2, 3, or 4.

 Selection 2 was selected from activities 5, 6, 7, or 8.
- (2) For the first change in the instructional plan, the options were activities 9, 10, 11, and 12.
- (3) For the second change in the instructional plan, the options

were activities 2, 6, 7, and 10.

- (4) For the third change in the instructional plan, the options were activities 4, 8, 9, and 12.
- For the fifth change in the instructional plan, the options were activities 1, 3, 5, and 11.

Originally, a set of 16 activities was developed by the experimenter. Raters trained in the use of the Structure of Instruction Rating Scale (SIRS) (Deno, King, Skiba, Sevcik, & Wesson, 1983) rated these 16 activities on seven of the 12 SIRS variables: teacher-directed learning, active academic responding, demonstration and prompting, controlled practice, pacing, oral reading practice, and silent reading These seven variables were selected because they could be rated from a description of the activity as opposed to requiring direct observation. Summing over the ratings on these variables for each activity provided an overall structure rating. Based on these ratings, the original 16 activities were rank ordered. The six most structured and six least structured were included in the study and the four that fell in the middle of the rank order were not used. Therefore, each activity included in the study thad a rating of high or low structure. Each set of options was arranged to include two highly structured activities and two low structured activities. /it is probable that an equal number of high and low structured 🔩 activities would be selected by chance.

Dependent Measure

Two dependent measures were employed in this study. The first measure was the number of times each activity was selected by teachers

and students. These selections were analyzed by high and low structure as well. The second dependent measure was the reasons stated for selection of particular activities. During the nine-week study, teachers and students were asked an open-ended question: why did you select this particular activity? The 25 student responses and 26 teacher responses to this question were categorized for analysis. The numbers of responses in the categories were analyzed.

Results

Activities Selected

In order to determine whether there was a difference between the number of structured versus unstructured activities selected by teachers and students, a chi-square analysis was conducted. As was mentioned earlier, prior to inclusion in the study each activity was rated by trained raters according to seven of the SIRS variables. The ratings for each activity appear in Table 1 along with the number of times each activity was selected by teachers and students.

Insert Table 1 about here

Data from Table 1 were collapsed across all high and all low structured activities in order to employ a chi square analysis. As is indicated in Table 2, teachers selected 52 high structured and 38 low structured activities. On the other hand, students selected 18 high structured and 28 low structured activities. The chi-square analysis revealed that this difference was significant (p < .05). Teachers, in general, tended to pick more high structured activities than did students.

Insert Table 2 about here

Reasons for Selection of Activities

Table 3 displays a frequency count of the reasons stated by teachers and students concerning why particular activities were chosen. The greatest number of students said they selected activities because they were fun. The second most frequent response was "I don't know." Other student responses were that the activity was easy or that the activity would help them to get farther ahead in the book. Teachers predominantly cited skill building, particularly in the areas of error reduction and comprehension, as the reasons for selecting specific activities. Building vocabulary also was mentioned as was the fact that the activity was easy to do.

Insert Table 3 about here

In order to examine differences between the reasons stated by teachers and students, categories were collapsed (see Table 4). Reasons relating to comprehension skills, vocabulary building, and error reduction were combined in a category called Skill-Related Reasons. Reasons concerning the ease or fun of the activity, making progress to finish the book, and "don't know" were clustered in a category called Non-Skill Related (Tangential) Reasons. The chisquare analysis showed that teachers stated significantly more skill-related reasons than did students (p \ .001).

Insert Table 4 about here

Discussion

The resource room teachers in this study picked more structured activities than students and stated skill related reasons more often than students. Generally, their decisions were more sound and better founded than were the students. This is a welcome finding given the literature to date on teachers' decision making for instructional purposes. Apparently, these resource room teachers were making good efforts based on good intentions to teach their students. It is especially promising to note that the activities selected most frequently by the teachers were oral reading and error practice, direct practice with prompting, and choral reading. These activities are very directly related to the task at hand, reading, and direct practice of behaviors has been, found to correlate highly with student achievement (Borg, 1980; Starlin, 1979). Therefore, the fact that 39 of the teachers' 90 selections involved direct practice indicates that teachers made some very appropriate decisions when selecting r instructional activities.

Another positive finding is that teachers almost unanimously stated appropriate skill-related reasons for selecting the specific activities. The teachers seemed to be making an effort to match the instruction to the learner. Also worth noting is that most of their statements seemed to indicate that they chose the activity in order to help decrease one of the student's deficit areas. In other words,

they chose the error reduction activity if the student was making a lot of errors, and the comprehension questions activity if the student had difficulty with comprehension. None of the responses indicated that the teacher selected an activity in order to capitalize on a student's strengths.

Also of interest is the finding that teachers often selected low structured activities and at times made their decisions for inappropriate, non-skill related reasons. Given that these were all special education teachers, the fact that they selected some low structured activities is worrisome. These low structured activities probably have little instructional value given the research literature on effective instruction. For example, making clay words and ilustrating a story provide little direct practice in reading. Yet, $^{oldsymbol{\gamma}}$ teachers selected a total of 38 of these low structure activities; that is, over one-third were less educationally sound than they should Over 10% of the Choices were Making Clay Words and Newspaper Hunt. If these experts make less than optimal decisions at times, then other teachers also may be making a number of poor decisions. Clearly, this calls for better training in instruction for Teachers must be well trained on the characteristics of teachers. effective, structured instruction/. Perhaps the reliance on curriculum materials, indicated by Joyce (1980) and McNair and Joyce. (1979) has hindered teachers from becoming more skillful in sinstructional decision making. /

Students, by and large, did not make decisions for skill-related neasons. And, for the most part, students tended to select low

clay Words. Obviously, the hypothesis that students might make better instructional decisions than teachers was not confirmed. Perhaps the students should have been instructed more completely in the decision—making process. Merely telling them to make a selection that would help them to read better was not powerful enough to guide their behavior. The students, it seemed, were more interested in picking the fun and easy options. However, these results should not be interpreted as evidence that students should not be allowed to select instructional procedures. Rather, when students are given options, the options should include only structured activities. When only structured activities are available, the student might still reap the benefits of student input including motivation and increased responsibility, and the student also will be instructed with potentially effective techniques.

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Footnote

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Table 1
Frequency Count of Activities Selected by Teachers and Students

Act	ivity Selected	Rating	Teacher Selected Activities	Student Selected Activities	Total
1.	Newspaper Hunt	L	6	6	,12
2.	Oral Reading and Error Practice	н .	12	9 ,	21
3.	Illustrating a Story	L	. 6	2	. 8
4.	Language Experience	Н	5	0	5
5.	Making Clay Words	Ļ	5	12	17
6.	Direct Practice with Prompting	H .	14	1	15
7.	Simplifying the Task	H	" 1	2 .	.3
8.	Reading and Reacting	L	, 9	1	10
9.	Choral Reading	Н	13	₹57	" e" 18
10.	Comprehension Questions	Н	. 7	1/	. 8
11.	Tape Recorded Stories	L	9	4	13
12.	Silent Reading and Retelling	L	3	3	6
Tota	1		90	46	136

Table 2
Chi-Square Results of Teacher Selected vs. Student Selected High and Low Structured Activities

Structure of Activities	Treatment Condition	Teacher Selected	Student Selected	Total
Number of High Structured Activities Selected	•	52	18	70
Number of Low Structured Activities Selected		38 ŕ	28	66

 $\chi^2 = 4.36$; p < .05

Table 3

Frequency Count of Reasons for Selection Stated by Teachers and Students

	Teacher Selected	Student Selected	Tota
The activity is fun.	1	8.	9
To help make more progress through the book.	1 .	2	` 3
To work on comprehension skills.	, 6	0	6
To help build vocabulary.	4 .	. 0	4
To work on reducing errors.	10	0	10
pon't know.	0	7	7
Easy activity to do.	4	5	. 9
Total	26	25	51

' Table 4
Chi-Square Results of Teacher vs. Student
Reasons for Activity Selection

Reason	Teacher Selected	Student Selected	Total
Skill Related	20	0	20
Non-Skill Related	6,	25	31

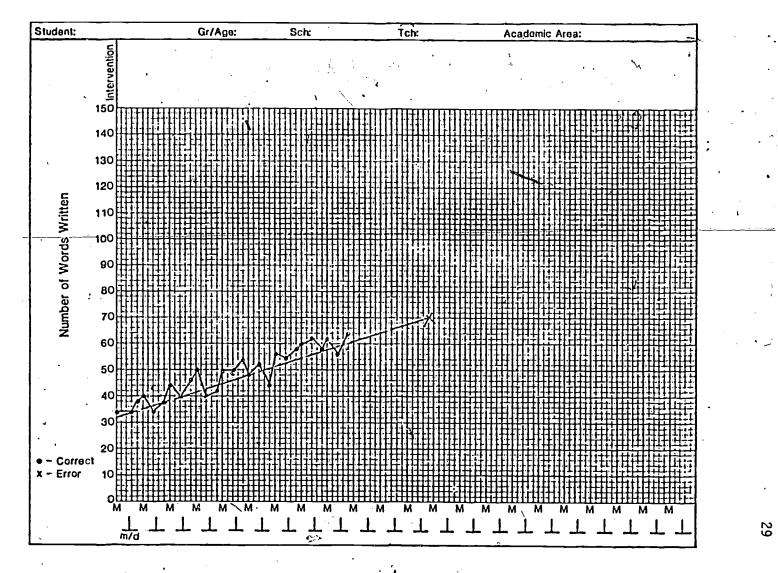


Figure 1: Illustration of performance measurement.

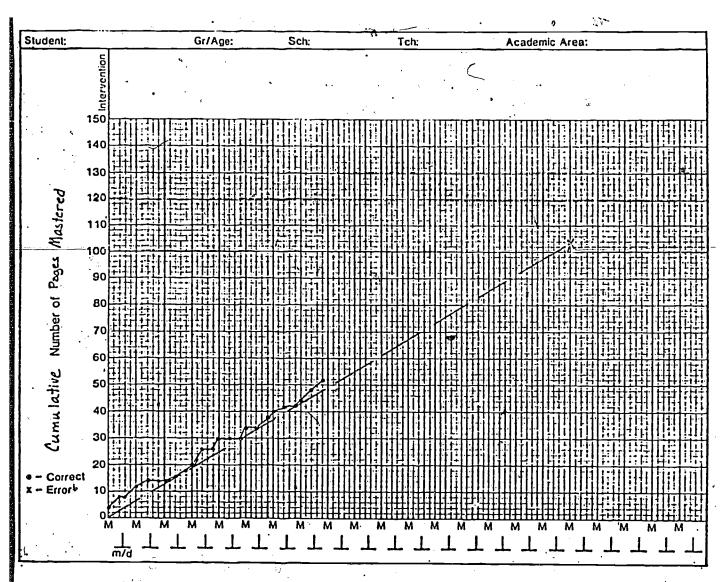


Figure 2: Illustration of mastery measurement.



Condition

Behavior

Criteria

LRG:

In ______ weeks, when _____ student will at the rate of 50 wpm or better presented with stories from Leyel _____, (reading series),

Figure 3. Format for Long-Range Goal: Reading

, 	CÓNDITION	BEHAVIOR	CRITERIA
Performance Charting Reading	Each successive week, when presented with a random selection from (level # from current instructional level - same as LRG) of (reading series)	student will read aloud	at an average increase of (70 on 50 wpm - actual performance) total # weeks remaining in school year.

arting:	CONDITION	BEHAVIOR	CRITERIA
Progress Chart Reading	Each week, when presented with successive stories from (Level #s from current instructional level to annual goal level)	student will progress	at the rate of stories per week maintain- ing the mastery criteria of at least 50 wpm (gr. 1 % 2) with 5 or fewer errors and 70 wpm (gr. 3-6) with 7 or fewer errors

Figure 4. Performance and Progress Charting Short Term Objectives for Reading.

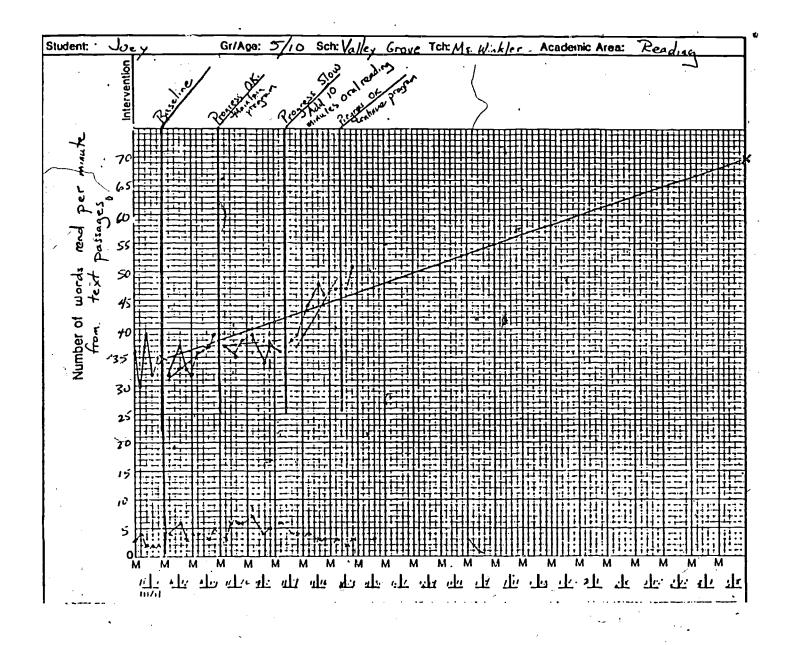


Figure 5. Using the split-middle technique to monitor student progress.

PUBLICATIONS

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